STATINTL

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RDT Security Testing

1. CLEAR CPU MEMORY

    A. Check counter, or constant, used for iteration of purge cycles for correct numerical value (1000_{10}).

    B. Initiate memory purge program.

    C. When memory purge is complete, verify counter value of zero, take memory dump, and verify that all non ROM locations in memory are zeroized.

2. CLEAR DISC MEMORY

    A. Verify disc purge cycle counter for correct numerical value (3).

    B. Initiate disc purge program.

    C. When disc purge is complete, verify counter value of zero, dump disc memory, and verify that all locations on disc are zeroized. If disc memory dump is not possible verify statistically, by randomly sampling fifteen 132 byte blocks before and after purge, that all locations on disc are zeroized.

RDT Security Testing

3. MESSAGE SEGMENT CONTINUITY VERIFICATION

    Through utility/console program, read an entire
TTY and data message from disc ensuring that:

    a) the entire message is contiguously written
       to disc; and

    b) that each block is both preceded by and
       followed by the TSN associated with the
       message. Choose messages of average
       length, i.e., 1970 bytes for TTY and
       1200 records for data at all possible
       record lengths.

4. TSN CHECK LOGIC VERIFICATION

    Alter one instruction in the program code that
performs the TSN check. System should halt when
TSN check program is executed.

5. SECURITY MISMATCH VALIDATION

    A. Enter valid TTY messages that have header
        classifications that are less than that
        of the text. Use the following input
        devices:

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5. <u>SECURITY MISMATCH VALIDATION</u> - (continued)

HEADER	TEXT
TTY	TTY
CRT	TTY
CR	TTY
PTR	PTR
CRT	PTR
CR	PTR
CRT	CRT

B. Enter valid DATA messages that have header

classifications that are less than that of

the text. Use the following input devices:

HEADER	TEXT
CRT	CRT
CRT	MT
CRT	CR
CR	CR
CR	CRT
CR	MT

C. All of the above inputs should fail security

validation and be presented to the operator

for action.

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